## ABSTRACT

A security system using fingerprints, including a fingerprint scan part creating a fingerprint image when a finger contacts the fingerprint scan part; a fingerprint image storing part storing representative reference fingerprint images and at least one auxiliary reference fingerprint image for registered users; and a control part determining whether one of the representative reference fingerprint images matches a first input fingerprint image input through the fingerprint scan part, reading auxiliary reference fingerprint images corresponding to a matching representative reference fingerprint image, and comparing other fingerprint images input after the first input fingerprint image with the auxiliary reference fingerprint images to determine user authentication.